

Musical Exploration and Improvisation: Impact on Beginners Learning the Cello

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Abstract

The importance of incorporating musical exploration and improvisation activities in teaching students how to play an instrument points to their individual needs and presents itself as a vehicle to promote further development of these children's technical and musical skills. This paper focuses on two case studies that intend to demonstrate the impact of musical exploration and improvisation in the technical and musical evolution of the student within the context of introduction to studying the violoncello. The results led to a discussion that could serve as a proposal for strategies on teaching-learning to play the cello.

1. Introduction

The use of creative activities in instrumental musical teaching classes could lead to advantages in the development of expressive and technical abilities in instrument playing. This paper's focal point is to evaluate the benefits of creativity – in particular, the benefits of musical exploration and improvisation – regarding the acquisition and/or correction of expressive and technical skills on cello students, contributing to a reflection about instrumental teaching strategies, and how creative activities may lead to educative development and success.

2. Literature Review

After the 1970s, several approaches to the study of creativity developed by authors such as Sternberg, Amabile and Csikszentmihalyi, attribute a group of factors to creative production which, through complex interaction, refer to the individual as much as to the social, cultural and historical variables that surround them [1].

For Radford, creativity may be seen as a complex process of information processing, which is present in the variables of a conceptual space resulting in multiple possibilities in terms of meaningful articulations [6]. The author adds that “*it is important to give full cognizance to the complexity of the information-processing task being performed and it is highly doubtful if all elements, all items of information, and the relationships between them, are*

before the conscious mind of the individual creative intelligence at any one time” (Radford, 2004:54). Radford also mentions that there is a need to recognise the existence of an emotional dimension in learning, that learning and intelligent thought require emotional dispositions for certain types of knowledge and construction, and that the creative individual has to feel the challenge, the desire to reconcile unknown elements with the information system. [6]

According to Lubart and Getz, emotions are seen as structures organised by biological, social and psychological factors and show how emotions can be involved in the production of metaphors that lead to creative ideas. When discussing metaphors and their role in creativity, it is important to note that metaphors make comparisons that may provide new perspectives to problems, as well as form or widen our initial perspective of the problem and communicate new ideas to a vast [5].

Creativity and improvisation have an important role in teaching music. Azzara indicates that improvisation happens when “*an individual has internalized a music vocabulary and is able to understand and to express musical ideas spontaneously, in the moment of performance*” [2]. He adds that there are important factors to consider in defining improvisation, such as the process of expressing musical thoughts and emotions, creating music within certain structures previously learnt and producing musical discourse.

In truth, when researching the role of improvisation within the context of the classroom, Azzara states that “*improvisation allows students to express themselves individually, to develop higher order thinking skills, and to develop a more comprehensive and intimate relationship with music (...)*”. For the author, it is important to develop improvisation in the community, develop an atmosphere where improvisation, spontaneity and interaction are nourished, understand improvisation as a way of life and not just an activity, believe that improvisation may be developed and that all students have the potential to improvise, observe that improvisation can affect other musical skills, and incorporate a model to develop improvisation skills that will help teachers as well as students.

In an attempt to find an answer as to how to teach students to improvise, Kenny and Gellrich [4]

suggest two strategies: *transcendence* and *deliberate practice*. *Transcendence*, as understood by the authors, is a state of consciousness that reaches beyond the knowledge accumulated within you, whereas the primary objective of *deliberate practice* is to stimulate the development of improvisation skills through the bases of acquired knowledge [4]. The authors also add that it is important that group activities complement individual practice. Although individual practice is beneficial to the development of technical and theoretical principles, improvisation emphasises collective performance more. Creative improvisation generally occurs in a collective performance atmosphere as opposed to an individual lesson, and the ability to react and create music through unpredictable dynamics and variables is one of the most distinct aspects of improvisation [4].

However, according to Bradshaw [3] there are some obstacles to collective improvisation: with no doubt the most problematic of them is the possibility that the individual may fear being ridiculed by their colleagues. For Bradshaw, improvisation contains an element of risk that is not attractive to the common student; however, he builds on this idea by suggesting that “a teacher can reduce the sense of risk by keeping an open atmosphere in class and by participating”.

Complementing Bradshaw’s perspective, Riveire [7] considers it important to evaluate the level of anxiety that the student, as well as the teacher, may feel in improvisation activities. Riveire notes the importance of eliminating high levels of anxiety in order to allow for musical thought to flow, and therefore suggests that the atmosphere created should stimulate confidence. Riveire also highlights that various teaching strategies emphasise the importance of manipulating an idea or skill to enrich learning. In music, the manipulation occurs using the body or mind with the objective of exploring different ways of making music, using a specific sound or a combination of sounds [7]. According to the author, the way that the musical material is manipulated when improvising causes the brain to process things differently, which in turn enhances the student’s ability to learn. Riveire [7] also writes that improvisation acts at the most advanced levels of the cognitive process (attention, analysis and synthesis), further adding that the implementation of this strategy in teaching music is a rewarding effort.

3. Methodology

The methodology used in this study is experimental and comparative. This methodological process consists of field work in addition to participant observation, which was based on bibliographical research techniques and action research, combined with a video recording and subsequent comparative analysis of data gathered.

This research focused on two case studies with two students, one 10 years of age (*Student A*) and the other 14 years of age (*Student B*), both in the 1st year of studying cello (“1º Grau do 2º Ciclo do Ensino Básico de Violoncelo” of the Portuguese Conservatory System). The students were observed for approximately 8 months. In order to demonstrate the impact of musical exploration and improvisation in the technical and musical evolution of these students, who were beginning to learn the instrument, three specific objectives were established:

- 1) To understand if the musical exploration and improvisation influence the development of technical and expressive skills;
- 2) To verify if, in the introduction to learning an instrument, musical exploration and improvisation can help solve technical and musical difficulties;
- 3) To observe, analyse and evaluate the technical and musical evolution of the two students involved in the study.

According to Figure 1, in order to check the objectives proposed, the 2 students had approximately 5 months of cello lessons *without* musical exploration and improvisation activities; during this period the students had a 30 minute individual lesson per week, however they always watched each other’s lesson. Next, the 2 students had approximately 3 months of cello lessons *with* musical exploration and improvisation activities; during this period the students had 20 minutes of individual lessons per week, and they always watched each other’s lesson, and in the remaining 20 minutes they had a joint lesson *with* musical and improvisation exploration activities.

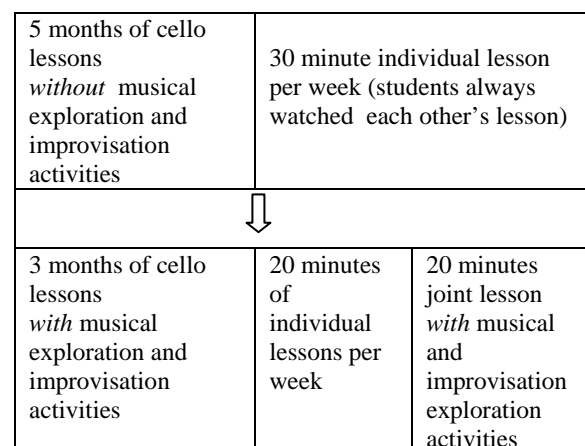


Figure 1. Sequence of cello lessons

Two distinct plans were designed; the first consisted of lessons *without* musical exploration and improvisation activities that were based on the Portuguese Conservatory curriculum; later, lessons *with* musical exploration and improvisation activities were planned based on observed technical and


musical problems that the students in the case study had throughout the first 5 months of lessons, as observed in Figure 2 and Figure 3.

Body → Instrument

Objectives:

1. To explore sounds that the body can produce;
2. To transcribe those sounds as graphic notation; 3. To find equivalent sounds in the cello;
4. To organize those sounds as a “story”, in a sequence.

Example made by *Student B*

1. “to yawn”
2. 
3. To play a descendent glissando in the 4th string

The aim of this session was to reduce muscular tension, which remained present after the first 5 months of lessons. At the end of the lesson, the student should know the different timbers that his instrument can produce, and should stay with the notion that his body can be consider an instrument. As a consequence he will be told to think that his instrument can be as natural as his body, and that the student should have the same *naturality* when playing the cello.

Figure 2. Example of lesson *with* musical exploration and improvisation activities

4. Findings

During the first 5 months of lessons, *without* musical exploration and improvisation activities, *Student A* showed several difficulties. The main difficulties observed were in the relaxing and positioning of the right arm, and in the fingering of the first position – left hand. Due to the level of difficulty, extending the first and the fourth finger was also dealt with in the musical and improvisation exploration sessions in order to complement and further develop the mechanism of this execution.

As the sessions *with* musical and improvisation exploration activities integrated in the lessons commenced, *Student A* slowly began to reveal less difficulty in positioning the left hand in the exact place of the first position, and was able to distinguish, most of the times without assistance, if the sound was tuned or not (a feat which was virtually impossible before). The obvious improvements with regards to relaxing and the positioning of *Student A*'s right arm were detected in the quality of the sound the student was able to make.

During the first 5 months of lessons *without* musical exploration and improvisation activities *Student B* revealed having difficulties with posture and relaxing mainly affecting the sound produced by the bow – right arm. As in the case of *Student A*, due to the level of difficulty, extending the first and fourth finger was also addressed in the musical and improvisation exploration activities.

During the period of musical and improvisation exploration activities *Student B* also gradually began to show less difficulties in relaxing the right arm and started to improve posture. The quality of sound produced in the movement of the bow was the object of obvious improvement by the student, as less tension in the arm and right hand was observed.








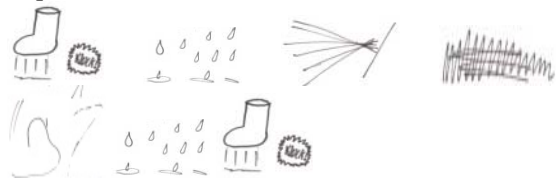
Sounds of the body	Sound as graphic notation	Equivalent sounds in the cello
1. feet		To pressure the bow in the 4 th string, resulting in a short sound.
2. claps		To lightly tap with the top of the fingers in the Cello.
3. sneeze		To play in an open string followed by a descendent glissando from the middle of the fingerboard.
4. scream		To play a note in the high pitch region of the 1 st string and then pressure with the bow.
5. yawn		Descendent glissando on the 2 nd string from the middle of the fingerboard, doing a diminuendo.
6. claps		To lightly tap with the top of the fingers in the Cello.
7. feet		To pressure the bow in the 4 th string, resulting in a short sound.
Sequence 1:  (feet/ claps / sneeze/ scream/ yarn/ claps /feet)		

Figure 3. Final result (objective 4 of Figure 2) – *Sequence 1* by *Student B* *with* musical exploration and improvisation activities

5. Discussion

Considering the general objective of this study, there is a need to make more of an effort towards a greater and more systematic appreciation when it comes to the influence of musical and improvisation exploration in the student's technical and musical development when beginning to learn how to play an instrument.

Analysing the result of the instrument lessons *without* musical exploration and improvisation

activities, both students revealed to have difficulties that they were unable to solve during the 5 months, such as relaxing, posture and fingering. Of course both students involved in this study progressively developed in the playing of their instrument throughout this initial period; in truth, the teaching strategies applied during the lessons were always meant to promote the technical and musical evolution of each student, while particularly addressing the difficulties observed in an attempt to solve them.

The observation of the musical and improvisation exploration activities that were incorporated in the cello lessons showed that with this type of activities the students may have a more complete opportunity to develop their technical and musical skills while overcoming the difficulties that they have. Consequently, the evolution of their learning becomes more efficient.

Having done research on the role of improvisation in the context of the classroom, Azzara states that improvisation allows the individual to express himself musically while developing their cognitive skills and their relationship with music [2]. The model of activities *with* musical and improvisation exploration, which was incorporated in the lessons of the students involved in this study, proved to be important and advantageous; in this context it was possible to help the students become conscious of their own difficulties and, by participating in the activities incorporated in a creative context, try to overcome them. It was also possible to observe that in this context the students could not only enrich their knowledge but also express themselves musically.

However, in approaching the obstacles and challenges that arise from incorporating activities *with* exploration and improvisation in the classes, it is important to emphasise the atmosphere of trust necessary in this type of activities. This may be affected by high levels of anxiety as referred to by Riveire [7] and Bradshaw [3]. During the sessions of musical and improvisation exploration it was possible to observe that the students became progressively more uninhibited as a result of trying to create a more relaxed and confident atmosphere in preparing for and doing activities with the students. This atmosphere of trust proved to be a starting point for the manipulation of the musical material explored making it possible to attain favourable conditions to develop the skills in question.

The initial addition of exercises based on metaphors in activities of musical and improvisation exploration helped the students make various comparisons that give them different perspectives on the problem/difficulty, as Lubart and Getz [5] make reference to in their study. It was possible for the students to broaden their initial vision and develop new ideas; later, these ideas unconsciously and

spontaneously helped the students to develop instrumentally.

The fact that these musical and improvisation exploration activities were carried out with both students simultaneously provided an interaction that gradually proved to be very positive, with both students progressively showing high levels of motivation.

6. Conclusion

Activities *with* musical and improvisation exploration have an influential impact on the student's technical and musical evolution. This impact, which was observed in this study, was progressive and came to complement the instrument development of the students. Curiously, the teacher/student relationship also benefited from this experience and created a deep bond resulting from the relaxed atmosphere that this type of activities demand, as this is probably a motivating experience in learning how to play an instrument.

7. References

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